

AMENDMENTS TO THE CLAIMS

1. (Original) An integrated circuit, comprising:
 - a first bus interface logic for coupling to a first external bus;
 - a microcontroller configured as an Alert Standard Format management engine, wherein the microcontroller is further configured to receive Alert Standard Format sensor data over the first external bus; and
 - a watchdog timer coupled to the microcontroller, wherein the watchdog timer is coupled to receive a reset input upon a predetermined change in a system state, wherein the watchdog timer is further configured to provide an indication to the microcontroller in response to an expiration of the watchdog timer.
2. (Original) The integrated circuit of claim 1, further comprising:
 - a second bus interface logic for coupling to a first internal bus, wherein data from the first external bus is routable by the embedded Alert Standard Format management engine over the first internal bus.
3. (Original) The integrated circuit of claim 2, further comprising:
 - an embedded Ethernet controller coupled to the first internal bus.
4. (Original) The integrated circuit of claim 3, wherein the embedded Ethernet controller is configured to route the Alert Standard Format sensor data from the embedded Alert Standard Format management engine to an external management server.

5. (Original) The integrated circuit of claim 1, wherein the indication provided to the microcontroller includes a microcontroller interrupt.
6. (Original) The integrated circuit of claim 1, wherein the integrated circuit comprises a bridge, wherein the bridge further comprises:
a third bus interface logic for coupling to a second external bus.
7. (Original) The integrated circuit of claim 6, wherein the bridge comprises a south bridge, wherein the first external bus is configurable as a first input/output bus.
8. (Original) The integrated circuit of claim 7, wherein the first input/output bus is an SMBus.
9. (Original) The integrated circuit of claim 1, wherein the reset input is provided to the watchdog timer by the microcontroller.
10. (Original) The integrated circuit of claim 1, wherein the reset input is provided to the watchdog timer from an external processor.
11. (Original) The integrated circuit of claim 1, further comprising:
a register configured to store system status information.

12. (Original) The integrated circuit of claim 11, wherein the microcontroller is further configured to read the system status information from the register in response to the indication.
13. (Original) The integrated circuit of claim 12, wherein the microcontroller is further configured to provide the system status information to an external management server.
14. (Original) An integrated circuit, comprising:

means for coupling to a first external bus;

controller means configured as an Alert Standard Format management engine, wherein the controller means is further configured to receive Alert Standard Format sensor data over the first external bus; and

timing means coupled to the controller means, wherein the timing means is coupled to receive a reset input upon a predetermined change in a system state, wherein the timing means is further configured to provide an indication to the controller means in response to an expiration of the timing means.
15. (Original) The integrated circuit of claim 14, further comprising:

a second means for coupling to a first internal bus, wherein data from the first external bus is routable by the embedded Alert Standard Format management engine over the first internal bus.
16. (Original) The integrated circuit of claim 15, further comprising:

an embedded networking means coupled to the first internal bus.

17. (Original) The integrated circuit of claim 16, wherein the embedded networking means is configured to route the Alert Standard Format sensor data from the embedded Alert Standard Format management engine to an external management means.
18. (Original) The integrated circuit of claim 14, wherein the indication provided to the controller means includes an interrupt.
19. (Original) The integrated circuit of claim 14, wherein the integrated circuit comprises a bridge, wherein the bridge further comprises:
a third means for coupling to a second external bus.
20. (Original) The integrated circuit of claim 19, wherein the bridge comprises a south bridge, wherein the first external bus is configurable as a first input/output bus.
21. (Original) The integrated circuit of claim 20, wherein the first input/output bus is an SMBus.
22. (Original) The integrated circuit of claim 14, wherein the reset input is provided to the timing means by the controller means.

23. (Original) The integrated circuit of claim 14, wherein the reset input is provided to the timing means from an external processing means.
24. (Original) The integrated circuit of claim 14, further comprising:
a storage means configure to store system status information.
25. (Original) The integrated circuit of claim 24, wherein the controller means is further configured to read the system status information from the storage means in response to the indication.
26. (Original) The integrated circuit of claim 25, wherein the controller means is further configured to provide the system status information to an external management means.
27. (Original) A client computer system, comprising:
a first external bus;
an integrated circuit, comprising:
a first bus interface logic for coupling to the first external bus;
a microcontroller configured as an Alert Standard Format management engine, wherein
the microcontroller is further configured to receive Alert Standard Format sensor
data over the first external bus; and
a watchdog timer coupled to the microcontroller, wherein the watchdog timer is coupled
to receive a reset input upon a predetermined change in a system state, wherein

the watchdog timer is further configured to provide an indication to the microcontroller in response to an expiration of the watchdog timer.

28. (Currently Amended) The client computer system of claim 27 [[16]], the integrated circuit further comprising:
 - a first internal bus; and
 - a second bus interface logic for coupling to a first internal bus, wherein data from the first external bus is routable by the embedded Alert Standard Format management engine over the first internal bus.
29. (Currently Amended) The client computer system of claim 28 [[17]], the integrated circuit further comprising:
 - an embedded Ethernet controller coupled to the first internal bus.
30. (Currently Amended) The client computer system of claim 29 [[18]], wherein the embedded Ethernet controller is configured to route the Alert Standard Format sensor data from the embedded Alert Standard Format management engine to an external management server.
31. The client computer system of claim 27 [[16]], wherein the indication provided to the microcontroller comprises a microcontroller interrupt.

32. (Currently Amended) The client computer system of claim 27 [[16]], wherein the integrated circuit comprises a bridge, wherein the bridge further comprises:
a third bus interface logic for coupling to a second external bus.
33. (Currently Amended) The client computer system of claim 32 [[21]], wherein the bridge comprises a south bridge, wherein first external bus is configurable as a first input/output bus.
34. (Currently Amended) The client computer system of claim 33 [[22]], wherein the first input/output bus is an SMBus.
35. (Currently Amended) The client computer system of claim 27 [[16]], wherein the reset input is provided to the watchdog timer by the microcontroller.
36. (Currently Amended) The client computer system of claim 27 [[16]], further comprising:
a processor configured to provide the reset input to the watchdog timer.
37. (Currently Amended) The client computer system of claim 27 [[16]], wherein the integrated circuit further comprises:
a register configured to store system status information.

38. (Currently Amended) The client computer system of claim 37 [[26]], wherein the microcontroller is further configured to read the system status information from the register in response to the indication.
39. (Currently Amended) The client computer system of claim 38 [[27]], wherein the microcontroller is further configured to provide the system status information to an external management server.
40. (Original) A method for operating an integrated circuit in a computer system, the method comprising:
entering a system state in the computer system;
resetting a watchdog timer on the integrated circuit;
determining an expiration of the watchdog timer on the integrated circuit;
evaluating the system state in the computer system; and
determining a system error in the computer system; and
responding to the system error by a microcontroller on the integrated circuit.
41. (Currently Amended) The method of claim 40 [[22]], wherein resetting the watchdog timer on the integrated circuit comprises resetting the watchdog timer on the integrated circuit in response to entering the system state in the computer system.

42. (Currently Amended) The method of claim 40 [[22]], wherein evaluating the system state in the computer system comprises evaluating the system state in the computer system in response to determining the expiration of the watchdog timer on the integrated circuit.
43. (Currently Amended) The method of claim 40 [[22]], further comprising:
storing an indication of the system state.
44. (Currently Amended) The method of claim 43 [[25]], wherein storing the indication of the system state comprises storing the indication of the system state in a storage location on the integrated circuit.
45. (Currently Amended) The method of claim 43 [[25]], wherein storing the indication of the system state comprises storing the indication of the system state in response to entering the system state in the computer system.
46. (Currently Amended) The method of claim 43 [[25]], wherein evaluating the system state in the computer system comprises reading the indication of the system state.
47. (Original) A computer readable medium encoded with instructions that, when executed by a client computer system, performs a method for operating an integrated circuit in the client computer system, the method comprising:
entering a system state in the computer system;
resetting a watchdog timer on the integrated circuit;

determining an expiration of the watchdog timer on the integrated circuit;
evaluating the system state in the computer system; and
determining a system error in the computer system; and
responding to the system error by a microcontroller on the integrated circuit.

48. (Currently Amended) The computer readable medium as set forth in claim 47 [[29]], wherein resetting the watchdog timer on the integrated circuit comprises resetting the watchdog timer on the integrated circuit in response to entering the system state in the computer system.
49. (Currently Amended) The computer readable medium as set forth in claim 47 [[29]], wherein evaluating the system state in the computer system comprises evaluating the system state in the computer system in response to determining the expiration of the watchdog timer on the integrated circuit.
50. (Currently Amended) The computer readable medium as set forth in claim 47 [[29]], the method further comprising:
storing an indication of the system state.
51. (Currently Amended) The computer readable medium as set forth in claim 50 [[32]], wherein storing the indication of the system state comprises storing the indication of the system state in a storage location on the integrated circuit.

52. (Currently Amended) The computer readable medium as set forth in claim 50 [[32]], wherein storing the indication of the system state comprises storing the indication of the system state in response to entering the system state in the computer system.
53. (Currently Amended) The computer readable medium as set forth in claim 50 [[32]], wherein evaluating the system state in the computer system comprises reading the indication of the system state.
54. (Original) A method for operating an integrated circuit in a computer system, the method comprising the steps of:
entering a system state in the computer system;
resetting a watchdog timer on the integrated circuit;
determining an expiration of the watchdog timer on the integrated circuit;
evaluating the system state in the computer system; and
determining a system error in the computer system; and
responding to the system error by a microcontroller on the integrated circuit.
55. (Currently Amended) The method of claim 54 [[36]], wherein resetting the watchdog timer on the integrated circuit comprises resetting the watchdog timer on the integrated circuit in response to entering the system state in the computer system.

56. (Currently Amended) The method of claim 54 [[36]], wherein evaluating the system state in the computer system comprises evaluating the system state in the computer system in response to determining the expiration of the watchdog timer on the integrated circuit.
57. (Currently Amended) The method of claim 54 [[36]], further comprising the step of: storing an indication of the system state.
58. (Currently Amended) The method of claim 57 [[39]], wherein storing the indication of the system state comprises storing the indication of the system state in a storage location on the integrated circuit.
59. (Currently Amended) The method of claim 57 [[39]], wherein storing the indication of the system state comprises storing the indication of the system state in response to entering the system state in the computer system:
60. (Currently Amended) The method of claim 57 [[39]], wherein evaluating the system state in the computer system comprises reading the indication of the system state.